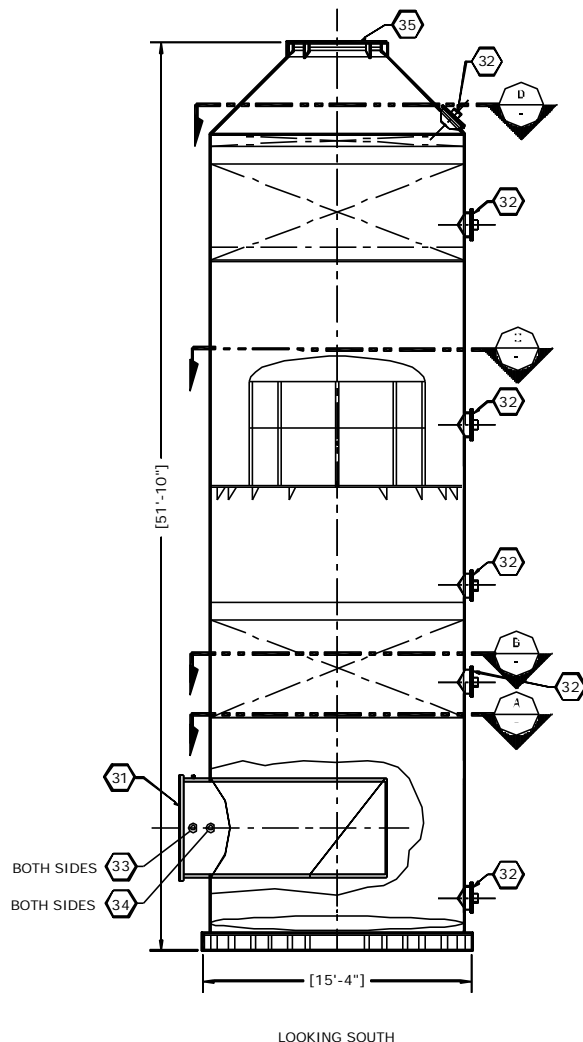


Service: (1) Remove HCl, SO₂, trace particulate from incinerator flue gas;

(2) Condense water in gas stream and cool gas to stack outlet temperature

Size: 51' 10" tall x 14' 6" I.D.

Contacting Device: Two 6' deep packed beds of 3" Intalox Saddles – See remarks



Operating and Mechanical Conditions

Design Press -13" W.C.

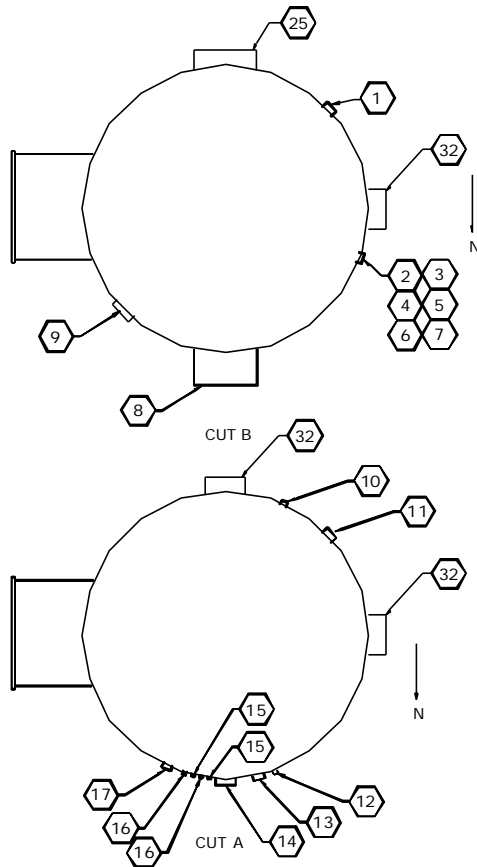
Design Temp 172 °F

Materials: Fiberglass reinforced vinylester with polyester inner veil as corrosion barrier

[illegible]

Comments

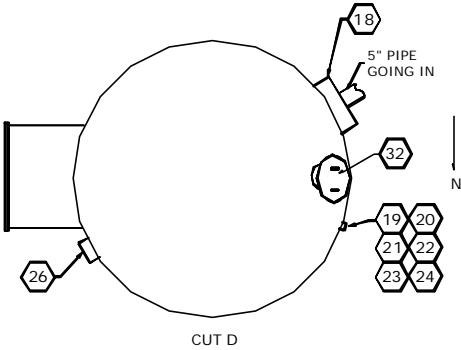
1. A Chimney tray is installed between the two packed beds so that drainage from the top bed will not mix with flow into the bottom packed bed.
2. Bottom is sloped towards bottom drain.
Note: configuration of inlet nozzle allows liquid seal between saturator and scrubber
3. There are 7 Access Ports #32. One is shown on cut A. It is at the elevation of the bottommost port on the South side of the vessel.



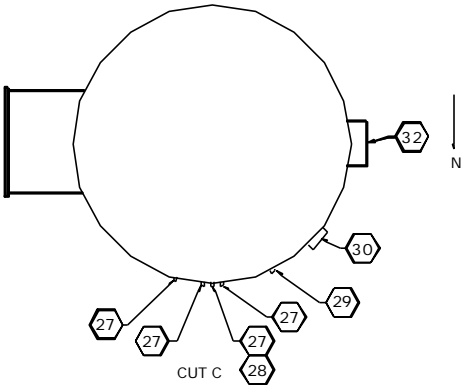
Nozzles		
Service	Size/Height	Mark no.
1 st Stage Header Flush Return	4" @ 23'-5"	1
Pressure Tap	2" @ 19'-2"	2
Pressure Tap	2" @ 22'-4"	3
Pressure Tap	2" @ 23'-4"	4
Pressure Tap	2" @ 20'-4"	5
Pressure Tap	2" @ 19'-5"	6
Pressure Tap	2" @ 18'-4"	7
Packing Removal	38"x26" @ 21'-5"	8
First Stage Feed	14" @ 21'-5"	9
Pressure Tap	2" @ 18'-4"	10
Header Flush Drain	4" @ 16'-2"	11
Manual Drain	3" @ 16'-0"	12
Manual Drain	8" @ 15'-0"	13
1 st Stage Drain	12" @ 15'-0"	14
Ph probe Access	1" @ 15'-1"	15
Ph probe Access	1" @ 15'-2"	16
Level Gauge	3" @ 14'-9" 3" @ 23'-9"	17
Packing Removal	38"x26" @ 21'-5" 38"x26" @ 28'-4"	25

Comments: all elevations above top of concrete below scrubber vessel

Nozzles		
Service	Size/ Height	Mark no.
Header Flush Return	17" @ 45'-4"	18
Pressure Tap	2" @ 45'-9-1/2"	19
Pressure Tap	2" @ 44'-5"	20
Pressure Tap	2" @ 43'-5"	21
Pressure Tap	2" @ 42'-5"	22
Pressure Tap	2" @ 41'-5"	23
Pressure Tap	2" @ 40'-5"	24
2 nd Stage Feed	14" @ 45'-4"	26
Ph probe access	1" @ 27'-4"	27
Not used	3/4" @ 32'-3"	28
Brine bypass	4" @ 27'-2"	29
2 nd Stage Drain	14" @ 27'-4"	30

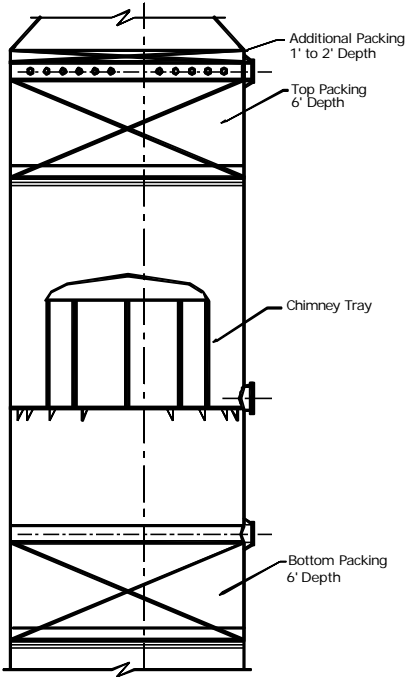


CUT D



CUT C

Comments: all elevations above top of concrete below scrubber vessel

Scrubber Internal Specifications	
<p>Packing:</p> <ul style="list-style-type: none"> (a) Size, Type, & Height: top & bottom both 6 ft of 3" Intalox Saddles or mass transfer equivalent. See remarks. (b) Method of packing: Dump into dry tower (c) Packing Arrangement: Dumped <p>Liquid Distributors:</p> <p>Top: Pipe Manifold</p> <p>Bottom: Launder Manifold</p> <p>Packing Support:</p> <p>Top: 1" thick FRP grating supported by FRP beams</p> <p>Bottom: 1" thick FRP grating supported by FRP beams</p> <p>Packing Removal Manways: At top and bottom of each packed bed</p> <p>Entrainment Separator: 1 to 2' of 3" Intalox Saddles dumped on top of top packed bed distributor</p> <p>Spray Nozzles: None</p>	
	Materials of Construction
	<p>Packing: Polypropylene</p> <p>Distributor Tray</p> <p>Top: Polyvinylchloride</p> <p>Bottom: FRP</p> <p>Chimney Tray: FRP</p> <p>Packing Support: FRP</p>
	<p>Remarks</p> <p>Alternately, the 1st stage or bottom packing may be 40 inches of Intalox snowflake packing covered with at least 12 inches of 3 inch Intalox saddles.</p>